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### **Featured Articles**

31st Marine Expeditionary Unit (MEU) Operations: The latest MCCLL report on MEU operations focuses on the missions of visit, board, search and seizure (VBSS) and humanitarian assistance/disaster relief (HA/DR).

**Marine Corps Engagements in Western Africa:** The Security Cooperation Marine Air Ground Task Force (SCMAGTF) Africa Partnership Station (APS-10) participated in military-to-military engagements this past spring with Ghana, Senegal and Liberia.

<u>Lessons from an Embedded Training Team (ETT)</u> in Eastern Afghanistan: An after action report from ETT 1-12 provides guidance that will be useful for all Marines who must work closely with the Afghanistan National Army (ANA).

**Keeping Abreast of the Latest Afghanistan De**velopments: An excellent source for up-to-date information on Afghanistan developments is the Afghanistan Review from NATO's Civil-Military Fusion Centre.

**MCCLL Collection Debrief for Operation Moshtarak:** The initial results of MCCLL interviews with the staff of 2d Marine Expeditionary Brigade (MEB) following the shaping and clearing phases of Operation Moshtarak have been documented in a collection debrief (to be followed shortly by a topical paper).

**Upcoming Changes to the MCCLL Lessons Man**agement System (LMS): Planned upgrades to the LMS should provide users with improved functionality for searching, organizing, and submitting lessons learned information.

The Marine Corps Center for Lessons Learned (MCCLL) newsletter provides "initial impressions" summaries that identify key observations and potential lessons from collection efforts. These observations highlight potential shortfalls, risks or issues experienced by units that may suggest a need for change. The observations are not **The Final Marine Aviation Logistics Squadron** (MALS) OIF Deployment: An AAR from MALS-26 addresses the last MALS deployment to Iraq, with emphasis on the drawdown, retrograde and redeployment mission.

Preventing MRAP and HMMWV Vehicle Roll-

**overs**: Best practices for preventing vehicle rollovers have been addressed in many source documents, including a 2008 MCCLL Safety Corner and a recent Center for Army Lessons Learned News from the Front.

The Most Popular Documents on the MCCLL Website: Readers may wish to check out some of the documents that have been down-loaded most often from the MCCLL website.

Best Practices for Mitigating the Homemade Explosives (HME) Threat: Another CALL document summarizes best practices for dealing with the HME threat and provides links to many other resources.

### News

Three items are highlighted this month: (1) an article from the Air Force on how a hurricane might effect the Gulf oil spill, (2) a smart phone application developed at the Naval Postgraduate School that provides Afghanistan-in-Your-Hand and (3) the latest newsletter from the Marine Corps Tactics and Operations Group.

Reading Lists and Book Review: This month, two books are featured: (1) Gates of Fire by Steven **Pressfield** from the Commandant's List (along with the Marine Corps University study guide) and (2) a book on the battles of Fallujah, New Dawn by Richard S. Lowry.

Roster of MCCLL Liaison Officers: This roster provides points of contact information for MCCLL representatives assigned at major Marine Corps and Joint commands and organizations.

service level decisions. In addition, some information in this newsletter has been compiled from publicly available sources and is not official USMC policy. Although the information has been gathered from reliable sources, the currency and completeness of the information is subject to change and cannot be guaranteed. Your comments on any topics addressed in this newsletter are welcome. Questions Mr. Harry T. Johnson, Editor Telephone: (703) 432-1279 DSN: 312-378-1279 can be directed to:

Lessons

## 31st Marine Expeditionary Unit (MEU) Operations

Marine expeditionary units (MEUs), in partnership with U.S. Navy amphibious ready groups (ARGs), are designed to provide a forward-deployed rapid response force that is capable of conducting conventional amphibious operations from the sea, by surface or by air while under communications and electronic restrictions, adverse weather conditions, or nighttime operations. Currently, the different MEUs vary in composition and capability based on the challenges they are designed to face. Since the 31st MEU, based out of Okinawa, is the only permanently forward-deployed MEU, it has unique characteristics in structure and mission compared with the CONUS-based MEUs.

In an effort to document the organization, training and equipment initiatives of the 31st MEU with respect to its maritime raid force (MRF) and its enduring requirement to conduct selected maritime contingency missions, a team from the Marine Corps Center for Lessons Learned (MCCLL) conducted interviews in February 2010 with the commanders and staffs of 31st MEU, Amphibious Squadron 11 (PHIBRON 11), and the MEU's major subordinate elements (MSEs). The focus of the collection was on the following areas: ■ MRF construct and execution, ■ visit, board, search and seizure (VBSS) operations, and ■ humanitarian assistance/disaster relief (HA/DR) operations. The results have been documented in the MCCLL topical paper, MEU Operations: VBSS and HA/DR, Lessons and Observations from 31st MEU.

A complete list of For Official Use Only (FOUO) observations and recommendations from the MEU Commander and staff, the COMPHIBRON, and the MSEs is contained in the topical paper. Among the observations releasable in this newsletter are:

• Training: Opportunities for interoperability training of the MRF and Navy elements are impacted by their geographical separation.

Col Paul Damren, USMC, Commanding Officer,

31st MEU (in discussing the valuable relationships

established with foreign partner nations that can

"[During this year's HA/DR deployment to the

"counterparts that we have been working [civil-

resources to the requirements of a particular type disaster.

aid in future HA/DR missions) noted that:

Philippines, the MEU staff] linked up with

⇒ The MRF members emphasized the importance of a "crawl, walk, run" approach to VBSS training, beginning with basic "hook and climb" training and then proceeding to more complex top-down missions.

⇒ A one week MRF leaders course is effective in preparing the leaders for use of the Rapid Response Planning Process (R2P2). Consideration should be given to extending the course to include VBSS and non-combatant evacuation operations (NEO) scenarios

military operations] with for years." tions (NEO) scenarios.

The preparations of the MEU for HA/DR missions focused primarily on planning, and matching MEU capabilities and

Establishing Relationships: The repetitive deployment cycles and strong relationships
of the 31st MEU, PHIBRON 11, and the staffs and ships of the USS Essex Amphibious
Ready Group (ARG) have proven to be a significant aid in Navy - Marine Corps amphibious warfare integration within the forward-deployed naval forces.

⇒ The habitual relationships developed with foreign military partners during recurring exercises and security cooperation events are expected to aid in subsequent HA/DR missions.

- HA/DR Operations: The forming of an organization like a civil military operations center (CMOC) can promote interagency coordination and efficiency in HA/DR efforts.
- ⇒ Since the MEU supported two HA/DR missions last Fall that occurred simultaneously (a typhoon in the Philippines and an earthquake in Indonesia), the embarked forces had to be reconfigured and split ARG operations established.
- ⇒ As a result, long-range communications were needed with sufficient personnel to operate the equipment at multiple locations.
- VBSS Operations. VBSS missions can be "top down" with the force fast roping from helicopters onto the target vessel or "bottom up" with the force boarding from small Navy craft.
- ⇒ Consideration should be given to using "mothballed" vessels as VBSS training venues to help familiarize MRF members with the various ship configurations.



Amphibious assault vehicles (AAVs) from the 31st MEU debark the well deck of the forward-deployed amphibious assault ship USS Essex (LHD2) during the MEU's patrol of the Asia Pacific region in the spring of 2010.



During a VBSS exercise, Marines from Battalion Landing Team (BLT) 3d Battalion, 8th Marines (3/8), 26th MEU, prepare a simulated casualty for transport onto a Navy MH-61S Seahawk.

## **Marine Corps Engagements in Western Africa**

The Security Cooperation Marine Air Ground Task Force (SCMAGTF) Africa Partnership Station (APS-10) was originally scheduled to participate in military-to-military engagements with eight countries in western Africa this past Winter and Spring. However, the earthquake in Haiti necessitated their redirection to take part in Operation Unified Response (OUR) and provide humanitarian assistance (HA)/disaster relief (DR) support during the early stages of the military and civil response to this devastating natural disaster. Upon completion of the OUR HA/DR support, the SCMAGTF resumed its original mission, although with a more limited scope that included engagements with the militaries of Ghana, Senegal, and Liberia. Prior to reaching these three countries, the SCMAGTF was joined by teams of Marines from Spain and Portugal who took part in the engagements between the U.S. Marines and the host nation militaries. The Senegal and Liberia engagements were conducted simultaneously, so the SCMAGTF operations were split between the two countries.

The SCMAGTF has prepared three after action reports (AARs) that provide many recommendations for ensuring successful engagements with countries in western Africa in the future (as well as with host nations in general). These three AARs can be accessed at:

- AAR for SCMAGTF APS-10 Military-to-Military Engagement in Ghana.
- AAR for SCMAGTF APS-10 Deployment to Liberia.
- AAR for SCMAGTF APS-10 Military-to-Military Engagement in Senegal.

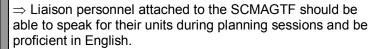
A complete set of SCMAGTF recommendations are included in these three AARs. Among the observations releasable in this newsletter are:

# From the AAR for the SCMAGTF APS-10 Military-to-Military Engagement in Senegal:

"Of all the countries with which SCMAGTF conducted operations, Senegal afforded the best opportunity for bilateral engagement across the spectrum of security cooperation. SCMAGTF was able to execute a core program of fundamental infantry and security skills: the Marine Corps Martial Arts Program (MCMAP), combat life saver (CLS) and live fire with maneuver. MCMAP was crucial in the interaction between SCMAGTF Marines and the Senegalese Fusiliers. It continues to serve as an "ice-breaker" to initiate personal interaction and cultural exchange. CLS served to provide every Senegalese service member, regardless of rank, the opportunity to learn a lifesaving skill set with both battlefield and peacetime application. Live fire builds individual confidence and reinforces leadership at the smallest unit level. . . "

⇒ Prior to the engagements, the SCMAGTF had limited knowledge of the level of proficiency of the host nation units

to be trained. The engagement plans had to be adjusted upon arrival in country in order to reflect the actual proficiencies of the host nation militaries.



- ⇒ Planning should address contingency operations, such as the potential for vehicular mishaps and associated vehicle recovery operations.
- ⇒ The movements of the Senegalese Marines during military operations in urban terrain (MOUT)

were judged to be very good, due to their prior experience in counterinsurgency operations and previous training with U.S. forces.

⇒ The Ghanaian Ministry of Defense requested that the SCMAGTF assist them in conducting an HA/DR exercise. The Ghanaian National Disaster Management Office (NADMO) and the SCMAGTF determined that during this engagement, the development of village emergency management plans should be the initial goal. It is recommended that future HA/DR exercises in Ghana build upon the results achieved during this year's exercise.

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An infantryman with SCMAGTF APS-10 instructs a group of Ghanaian military personnel on the fundamentals of the Marine Corps Martial Arts Program (MCMAP) during the March 2010 military-to-military engagement.



Marines with SCMAGTF APS-10 are joined by members of the Senegalese Armed Forces as they offload personnel and vehicles at Guerero Beach, Senegal, in preparation for military-tomilitary familiarization events.

SHUUL BRADIA

## Lessons from an Embedded Training Team in Eastern Afghanistan

The Marine Corps has deployed units on the ground in eastern Afghanistan since the early days of Operation Enduring Freedom (OEF). Since 2007, Marines deploying to this region have generally been assigned to embedded training teams (ETTs) that live with units of the Afghanistan National Army (ANA), facilitate their training, mentor their soldiers across all staff functions, and provide coalition force capabilities during combined operations. However, Marine Corps deployments to the eastern part of the country are now discontinued as the last of these ETTs redeploy to CONUS. The focus of Marine Corps efforts will continue in southern Afghanistan, in particular, in the newly formed Regional Command - Southwest (RC-

SW).

One of the last ETTs to deploy to eastern

Afghanistan was ETT 1
12, the first ETT sourced from I Marine Expeditional Pendleton, and prepare a tions concerning its training 4 April 2009 to 21 April closely with the ANA irreserved.

Afghanistan National Army (ANA) soldiers analyze their shot groupings during basic marksmanship training conducted by Marines from ETT 1-12 at Combat Outpost Blackhawk.

#### LtCol Paul Brickley, Officer in Charge, ETT 1-12:

"... Afghanistan National Army (ANA) soldiers are not afraid to fight. They go on patrols, man outposts, conduct operations, and endure living conditions, sanitary situations, and leadership that no coalition soldiers will. They are not afraid of gunfire and will fight back. They need little encouragement with respect to their role in operations. . The bottom line is that these soldiers could be anything in Afghanistan: Taliban, [other militant groups such as the] HiG and Haqqani, AP3 [Afghan Public Protection Program], Afghanistan National Police (ANP), ANA, or clerks in Kabul. For whatever their motivation, they joined the ANA, risking their lives—and often a source of their family's income—in the process. They deserve the benefit of the doubt, and a properly embedded ETT will know ahead of time if there is a problem. . .."

from I Marine Expeditionary Force (MEF) to complete its deployment, return to Camp Pendleton, and prepare an after action report (AAR) with observations and recommendations concerning its training and mentoring mission. This **ETT AAR for the period from 4 April 2009 to 21 April 2010** provides actionable guidance for Marines who must work closely with the ANA, irrespective of the specific mission or Afghanistan region. As noted by LtCol Paul Brickley, Officer in Charge, ETT 1-12, "The ETT, or any deployed unit, needs to recognize the environment and be prepared to interact, with a collage of different people. The key is the ability to work well with others - other U.S. services, other militaries, other people. Everyone there has an interest, an objective, and a position they are advocating. Figuring out what those are, and how they can benefit your own role and mission, is critical.."

# **Keeping Abreast of the Latest Afghanistan Developments**

One of the best sources for up-to-the-minute information on the latest coalition force developments in Afghanistan, as well as those of their civilian counterparts, is *Afghanistan Review*, published by NATO's Civil-Military Fusion Centre. This organization was established by the NATO Supreme Allied Command Transformation as a tool to "facilitate information sharing between civilian and military organizations and individuals during natural and man-made crisis situations." The Centre has now entered its second year of operations and continues to promote shared, common situational awareness,

among interested parties in Operation Enduring Freedom (OEF). In particular, the Centre works to mitigate the cultural differences and biases that exist between the military and civilian communities. The *Afghanistan Review* is only one of the Centre's publications that readers of this newsletter may find useful and informative, with previous publications having addressed the military and civil government responses to the Haiti earthquake and recent military operations in northeast Africa. Each issue of the *Afghanistan Review* includes timely topics on economic stabilization, humanitarian assistance, infrastructure, security, and social well-being. In addition, all of the information in each issue is extracted from publicly-releasable sources. Recent issues of the Review are available on the Marine Corps Center for Lessons Learned (MCCLL) website at *Afghanistan Review*, while all of the Centre's recent publications are available on its *Civil-Military Overview Website*.

As has been noted in several recent monthly newsletters, MCCLL also maintains a database of Afghanistan resources that is updated as additional AARs, topical papers, and other source documents are added to the MCCLL repositories. Please access the link in the graphic to the right to review these documents.

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## **MCCLL Collection Debrief for Operation Moshtarak**



Marines from Company I, 3d Battalion, 6th Marines (3/6), investigate a possible improvised explosive device (IED) while on patrol in Marjeh during Operation Moshtarak.

Operation Moshtarak was conducted by Marines from 2d Marine Expeditionary Brigade (MEB) - Afghanistan, together with their Afghanistan National Security Force (ANSF) partners, this past spring in an effort to clear the Taliban from one of its last remaining strongholds in Helmand Province and to eliminate a major Taliban logistics and command and control node. Prior to the operation, the Taliban had fostered the belief that the city of Marjeh in central Helmand was impenetrable and essentially constituted "no-go" terrain for coalition forces. This belief was reinforced by the fact that there had been no Marine Corps presence in the city for the previous seven to eight months. One of the keys to Operation Moshtarak was considered to be the partnering of Marines and the ANSF. In this regard, the ANSF strength in the MEB area of operations grew over ten fold from the summer of 2009, so that the ratio of Marines to ANSF soldiers at the start of the operation was about two to one.

Although the shaping and clearing phases of Operation Moshtarak achieved their major goals, efforts to hold and build upon these achievements are ongoing and will continue for the foreseeable future. In the long run, the ultimate success of

the operation depends upon the ability of the Government of the Islamic Republic of Afghanistan (GIRoA) to successfully capitalize on the results of the operation.

From late April to early June 2010, a collection team from the Marine Corps Center for Lessons Learned (MCCLL) conducted twenty-four interviews with command element personnel from 2d Marine Expeditionary Brigade (MEB), as well as planners from Marine Aircraft Group (MAG) 40 and the Department of State representative to the MEB, concerning their experiences during the shaping and clearing phases of Operation Moshtarak. These interviews were conducted at Camp Lejeune, MCAS Cherry Point, MCAS Beaufort, and Camp Leatherneck, with the principle focus being on the performance

BGen Larry Larry Nicholson, Commanding General, 2d MEB:

"... What will spell defeat or victory in Marjeh is the ability of the Afghans to come in there and convince the population that: 'Yeah, it's not perfect, but you are better off with us. We're going to do more things for you than the Taliban'..."

of command element operations in the context of the coalition, joint and interagency environment faced in Afghanistan. The results of the collection will be the subject of a MCCLL topical paper that is scheduled to be published at the end of August (and will be highlighted in an upcoming newsletter). In an effort to disseminate the observations and recommendations of the 2d MEB leadership and staff in a timely manner to assist Marine Corps leaders who are training and educating deploying Marines, their initial impressions (in "raw" form) have been

documented in a collection debrief, entitled <u>Coalition</u>, <u>Joint</u>, <u>Interagency Operations</u>:

<u>Operation Moshtarak (Marjeh) - A Case Study</u>.

A comprehensive list of FOUO observations and recommendations from the 2d MEB leadership and staff is contained in the collection debrief. Among the comments made by the principals that are releasable in this newsletter are:

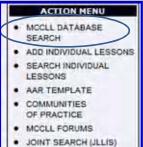
- **Training:** BGen Nicholson, Commanding General, 2d MEB, commented that Marines must train for high intensity conflicts. If they train for these conflicts, they should also be able to perform low-end missions as well. If training is focused on low-end conflicts, Marines will have little chance of performing high-end missions successfully.
- Planning: The ANSF must be involved in all aspects of planning, as well as of operations.
- Operations: Effective key leader engagements was key during both the shaping and clearing phases and in preparation for the subsequent holding and building phases.
- ⇒ In dealing with NATO and coalition forces, watch officers must be intimately familiar with rules of engagement and tactical directives.
- ⇒ Information operations need to take into account all the means of influencing the local populace and achieving the campaign objectives.
- Logistics: One of the most critical planning considerations was to satisfy the requirement for re-supplying the ground elements once they were inserted into the city.



Marines from the 81mm Mortar Platoon, Weapons Company, 1st Battalion, 6th Marines (1/6), fire a smoke mission in Marjeh during Operation Mosharak.

## **Upcoming Changes to the MCCLL Lessons Management System**

In August, an upgrade to the Lesson Management System (LMS) on the Marine Corps Center for Lessons Learned (MCCLL) Website will be released that incorporates improved functionality and user interface for searching, organizing, and submitting Marine Corps lessons learned information. Below is a list of the planned upgrades:



- 1. Search Engine Functionality: In March 2010, MCCLL implemented a new search engine capability to better enable the retrieval of focused lessons learned information from MCCLL's four terabyte lessons learned data repository. Implementing the new search engine features and capabilities has proven to be challenging, but our developers have been making continual improvements to the search engine. Recent improvements include:
- Improved search returns (files are more effectively indexed by the search engine resulting in more comprehensive search return results).
- Improved title information is returned for each search return.
- Improved Content/Summary descriptions (to give the searcher better context of where the keywords are located in the returned document/record).
- Duplicative search results eliminated (duplicate returns are no longer displayed).
- Improved capability to organize search return results in electronic binders.
- Saved Searches. Users can define search terms for future reference. Any time a new record is added to the lesson learned data repository that contains a saved search term, an email notification will be made with the corresponding information. This functionality was previously contained in the 'my profile' area, but has shifted to the Search Page, in the Saved Search Tab.
- An updated Help tab is available on the search screen that explains the search engine improvements/capabilities.

2. <u>Binders</u>: Electronic binders are used to organize, store and share lesprovements to the binder user interface. Upgrades include:

- Improved "My Binders" display that contains 1) binders created by that user, and 2) additional binders as specified by that user.
- A search feature on "My Binders" in order to add specified binders.
- Sub-binder functionality. Binders can be placed inside binders.
- Improved binder content functionality. Results from search returns can be posted to a specific binder that users specify on their My Binder screens.
- An updated Help tab is available on the My Binders screen that explains the Binders improvements/capabilities.

3. Registration/User Profile Information: Several user profile fields have been updated to allow MCCLL to better track the demographics of its subscribers in order to better target lessons learned products to the Marine Corps. Upgrades include:

- Marine Corps Force Structure data has been implemented so that users will select the Battalion/Squadron level unit they
  are assigned to. The unit selected will impact how lessons are routed and link the individual to their command lesson
  manager and a locally assigned MCCLL liaison officer for lessons learned support.
- Improved Rank and Service (USMC, USN, USA, USAF) drop down menu selections.
- On the SIPR Website: A unique username (firstname.lastname) will be assigned to all new and existing users that is independent of an e-mail address. Log-in will no longer be tied to email address as it is today. This will prevent confusion for Marines that forward deploy and get assigned different e-mail addresses. Nothing changes on the NIPR website - it will remain CAC/Pin enabled for access.
- 4. <u>Command Lesson Managers/Lesson Approval</u>: Command Lesson Mangers will be assigned at the Battalion/ Squadron Level. Command Lesson Managers review lessons for activation for their units and are MCCLL's point of contact for after action reports and other lessons learned inputs. If a Command Lesson Manager is not assigned at the Battalion/ Squadron level then the Command Lesson Manager role elevates to the next higher headquarters (Regiment, Group, Division, Wing, etc) that has a Command Lesson Manager assigned.
- 5. <u>Software Release Notes</u>: Release notes, similar to the above descriptions, will be available at the "Software Release Notes" link that will be placed within the Reference Menu on the homepage. This page will be another means to communicate system changes.

## The Final Marine Aviation Logistics Squadron OIF Deployment

The Marine Corps formally completed its Operation Iraqi Freedom (OIF) mission (soon to be officially referred to as *Operation New Dawn*) on 23 January 2010. The final after action reports (AARs) from the last remaining Marine Corps commands and units to be deployed to this theater continue to provide many observations and recommendations concerning the drawdown, retrograde and redeployment mission, as well as efforts to ensure that the Iraqi Security Forces (ISF) have the training, equipment and leadership necessary to address remaining pockets of insurgent activity. Several of these AARs have been highlighted in recent newsletters, including the final Marine aviation combat element (ACE) OIF deployment (highlighted in the <u>Marine Aircraft Group (MAG) 16 AAR</u>) and the final regimental combat team (RCT) OIF deployment (addressed in the <u>RCT-8 AAR</u>).

The latest AAR prepared by one of the final Marine Corps units to return from Iraq was prepared by Marine Aviation Logistics Squadron (MALS) 26. The <u>MALS-26 AAR for the period from January 2009 to February 2010</u> highlights the extreme operational tempo associated with the movement of gear out of theater during this period. All of the previ-

LtCol Joe H. Adkins, Jr., Commanding
Officer, MALS-26, unveils a new sign
marking Memorial Lane aboard Al
Asad Airbase, in honor of military

service members who died during

MEMORIAL (

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DEDICATED TO THOSE IN THE

AMERICAN MILITARY



A dynamics component NCO from MALS-26 and a production NCO from the U.S. Army's1st Battalion, 214th Aviation Regiment, work together on the aft rotor head of a CH-47 Chinook at Al Asad Airbase.

ous five years of equipment, supplies and munitions buildup had to be addressed, while, at the same time, flight line operations continued in full swing. Although the retrograde was successfully accomplished, additional logistics manpower would have been desirable.

This retrograde was also the first time that the Marine Corps Logistics Command (MCLC) was used to support air wing requirements, with MCLC responsible for such activities as completing the transportation control number (TCN), certifying the unit designation list (UDL), submitting the export traffic release request (ETRR), and setting up the movement of gear to its final destination. MALS-26 recommends that this process be continued for future retrogrades of air wing assets.

The AAR also highlights the need to initiate and maintain direct contact with commercial shipping carriers that service the expeditionary and combat environments. The establishment of strong relationships enables information sharing that will help ensure better logistics decisions are made and best practices are implemented for moving material through the supply chain.

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## **Preventing MRAP and HMMWV Vehicle Rollovers**

The topography, road conditions, and operational environments in Afghanistan (even more so than in Iraq) create the potential for vehicle rollovers under both combat and non-combat situations. Unfortunately, many of the resulting injuries and deaths of Marines and other service members could have been prevented or reduced in severity. Vehicle rollovers can be especially serious when a body of water is involved, with a significant portion of non-combat related rollover deaths having resulted from drowning. Even though the dangers associated with vehicle rollovers have been emphasized repeatedly to Marines via safety alerts and training classes, accidents continue to occur, especially in the mine-resistant, ambush-protected (MRAP) variants and the new MRAP All Terrain (M-ATV) vehicles. In addition, when rollovers do occur, Marines have not always responded appropriately.

As far back as October 2008, the prevention and mitigation of MRAP and HMMWV rollovers was the subject of a MCCLL Safety Corner. Since then, numerous guidelines have been promulgated for preventing rollovers and for safely egressing vehicles once a rollover occurs. Many of these have been included in a MCCLL repository on the topic of MRAP Mishap Events and Safety Concerns. The MRAP Egress Trainers (METs) located at Twentynine Palms, CA, Camp Lejeune, NC, and Marine Corps Base Hawaii, are among the latest training venues to help Marines prepare for the eventuality of an MRAP rollover. One of the most recent documents addressing the dangers posed by vehicle rollovers is from the U.S. Army's 203rd Brigade Support Battalion (BSB), 3rd Heavy Brigade Combat Team, 3rd Infantry Division (3/3 ID), entitled MRAP and HMMWV Rollovers Prevention, promulgated in a News from the Front newsletter distributed by the Center for Army Lessons Learned (CALL).



A combat operations watch chief from Combat Logistics Battalion (CLB) 3 egresses from the MRAP Egress Trainer (MET) at Marine Corps Base Hawaii.

## The Most Popular Documents on the MCCLL Website

As we continue to highlight the MCCLL topical papers and other documents that have been downloaded most often from our website, we hope that this information proves to be useful in planning your own reading regimens. As an example, last month, the MCCLL topical paper addressing infantry battalion operations in Afghanistan (based on a MCCLL collection with 2d Battalion, 8th Marines) was accessed the greatest number of times (see the article on this collection in the MCCLL

June newsletter). Marines from other infantry battalions who are scheduled to deploy may also wish to review this report. The table to the right summarizes the ten MCCLL reports that were viewed most often (in order) during June. These reports were read by Marines in all grades from E-3 to O-6.

1. Infantry Battalion Operations in Afghanistan

**Top Ten MCCLL Reports** 

- 2. Regimental Combat Team Afghanistan Operations
- 3. Operations in Afghanistan, Volume II: An Anthology of Reports and Lessons, 2007 2009
- 4. MV-22B Osprey Operations During Initial Marine Expeditionary Unit Deployment
- 5. Combat Logistics Battalion 46 Deployment Cycle Review
- 6. Security Force Assistance: Georgia Deployment Program
- 7. Civil Affairs Detachment Operations in Support of Marine Expeditionary Brigade Afghanistan
- 8. Marine Expeditionary Unit Operations: VBSS and HA/DR
- 9. <u>Medical Evacuation Support of MEB-A Operations</u>
- 10. Marine Expeditionary Brigade Afghanistan (MEB-A) Operations

They were accessed most often by DoD civilians and contractors and by officers in grades from O-1 through O-5 and enlisted personnel in grades from E-5 through E-8.

In comparison, the second table highlights the documents of all types that were downloaded the greatest number of times in June. Four of the MCCLL topical papers listed above are on this list, as well as the May editions of our monthly newsletter and safety corner.

Another statistic from this past month shows that 1,209 new users registered on our NIPR

- 1. Infantry Battalion Operations in Afghanistan (MCCLL)
- 2. <u>1st Battalion, 6th Marines (1/6) "First 100 Days" OEF AAR</u> Top Ten
- 3. MCCLL May 2010 Newsletter
- 4. 24 MEU AAR: Operation Unified Response Haiti
- 5. "Sir, All Equipment Accounted For," (HQ USMC I&L)
- 6. Regimental Combat Team Afghanistan Operations (MCCLL)
- 7. MCCLL May 2010 Safety Corner
- 8. Operations in Afghanistan, Volume II: An Anthology of Reports and Lessons, 2007 2009 (MCCLL)
- 9. MV-22B Osprey Operations During Initial Marine Expeditionary Unit Deployment (MCCLL)
- 10. Afghanistan for Dummies (3d MAW)

website, compared with 832 who registered in May. Many of these new registrations (which were the most ever in a single month) resulted from the MCCLL user survey that was distributed in June. We intend to highlight some of the results from this survey in an upcoming newsletter.

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# **Best Practices in Mitigating the Homemade Explosives Threat**

The recent threat from homemade explosives (HME) has ranged from domestic incidents such as the vehicle-borne explosives-laden SUV found in New York City's Times Square this past May (as well as the Oklahoma City bombing in 1995) to the improvised explosive devices (IEDs) that have become the weapons of choice in both Iraq and Afghanistan. In particular, Marines in Afghanistan are facing an escalating IED threat that is largely fueled by HME as the explosives component. A 40-hour course taught by a Joint Asymmetric Threat Awareness and Counter-IED (JATAC) team in Marine Corps Air Station Yuma, AZ, for explosive ordnance disposal (EOD) teams is evidence of the importance placed on the mitigation of this threat by the Marine Corps. This course covers subjects ranging from bomb-making materials to the various types of explosives that can be made from them.

The Center for Army Lessons Learned (CALL) Counter-IED Section has prepared a short report, entitled **Best Practices in Homemade Explosives Environments**, that provides background information on the employment of HME in IEDs and discusses current enemy tactics for their use, especially in Afghanistan. The CALL report outlines methods for identifying the signatures and precursors of HME, shows the layout of typical HME manufacturing labs in Afghanistan and Iraq, and includes photographs of recent lab discoveries.

The CALL report also provides numerous links to other unclassified (For Official Use Only) source documents that furnish additional guidance on approaches for defeating the HME threat. These included source documents located on the websites of CALL, Joint Forces Command (JFCOM), the Joint Knowledge and Information Fusion Exchange (JKnIFE) and Combined Joint Task Force (CJTF) Paladin.



**Downloads** 

A homemade explosives (HME) course instructor from the Joint Asymmetric Threat Awareness and Counter IED (JATAC) team teaches explosives ordnance disposal (EOD) Marines at Marine Corps Air Station Yuma, AZ, about some of the main HME ingredients.

### News

# How Would a Hurricane Effect the Gulf Oil Spill?

While the Gulf oil spill may soon be contained (and the hurricane threat so far this season has bypassed the general area of the spill), the cleanup effort in the Gulf is expected to continue for the remainder of this year's hurricane season. The impact of a hurricane on the remaining oil in the Gulf and on the ongoing cleanup effort is the subject of an article in a **Special Bulletin** from Headquarters Air Force Studies & Analyses, Assessments and Lessons Learned (AF/A9), which also includes lessons learned based on responses to previous hurricanes and other natural

disasters. As noted in the bulletin, "... the hurricane's high winds and seas will mix and "weather" the oil, which actually can help accelerate the biodegradation process. The high winds, however, may also distribute oil over a wider area, but it is difficult to model exactly where the oil may be transported since movement of oil would depend greatly on the track of the hurricane. Keeping such unpredictability in mind, storm surges may carry oil into the coastline and inland as far as the surge reaches. Similarly, debris resulting from the hurricane may be contaminated by oil from the Deep-water Horizon inci-

dent, but also from other oil releases that may occur during the storm. Keeping in mind that a hurricane's winds rotate counter-clockwise, in very general terms it is likely that a hurricane passing to the west of the oil slick could drive oil to the coast whereas a hurricane passing to the east of the slick could drive the oil away from the coast. . ." In addition to discussing the oil spill, the bulletin includes a forecast for the 2010 hurricane season and a summary of lessons learned from the 2004 tsunami in the Southeast Pacific.

# "Afghanistan-in-Your Hand" Smart Phone Application

NPS Students Design "Afghanistanin-Your Hand" Smart Phone App, by Barbara Honegger, Naval Postgraduate School (NPS)

"While smart phone apps can put a map in your hands, two Naval Postgraduate School students have designed one that puts a whole country in your hands – Afghanistan.

That's why National Security Affairs Research Professor and Director of NPS' Program for Culture and Conflict Studies (CCS) Thomas Johnson calls the new BlackBerry application tailored by Air Force Captains Robert Davis and Christopher Joers for in-theater warfighters, "Afghanistan-in-YourHand."

Professor Johnson gave the students the option of conducting research and writing the new software application in lieu of the usual research paper for a course he teaches on contemporary Afghan politics, and Davis and Joers jumped at the opportunity.

"As a result of extensive travels in Afghanistan and briefings with top military commanders, I became aware of the urgent need to make [Program for Culture and Conflict Studies]-created data widely available to military personnel in undeveloped regions and nonurban conflict zones where there's typically either no or limited Internet access." Johnson

said. "We call the solution "Mobile-Afghanistan" – or MobiAFG for short – because it's the mobile, off-line version of our CCS Web site. Like the Web site, it aggregates important data with geospatial maps and analyses in a 21st Century electronic gazetteer streamlining open-source data about this critical country, its people and leaders to in-theater warfighters.' "MobiAFG is kind of like a CliffsNotes for Afghanistan," said Davis. "It gives you instant access to condensed information about the country any time, any where, 24/7/365, in the palm of your hand. All you need is a Black-Berry with the application . . . ""

## The Latest Newsletter from MCTOG

The MCCLL January 2010 newsletter highlighted the inaugural edition of the Marine Corps Tactics and Operations Group (MCTOG) newsletter, which is being produced to disseminate information to the operating forces concerning the latest developments in ground combat element (GCE) training. The second edition of the MCTOG newsletter is now available, with up-to-date information on the most recent developments in GCE training, along with other initiatives that will impact the ways in which Marines are trained. Among the topics in this edition are: the latest training developments, including the Spartan Resolve (SR) 3-10 exercise at Camp Pendleton, the Tactical MAGTF Integration Course (TMIC), and the road ahead for synchronizing the training and readiness (T&R) manuals, ■ an overview of the recent Counterinsurgency (COIN) Leaders Course at 29 Palms, ■ the new capability of MCTOG to provide CENTCOM certification (Target Mensuration Only) for training, ■ advancements in the Tactical Lessons Integration Program (TLIP), ■ ongoing doctrine and standards initiatives, and ■ the recent move of MCTOG to new facilities.

The newsletter notes that "lessons

learned occur as a result of an evaluation or observation of an implemented corrective action that produces improved performance or increased capability. MCTOG is further developing its TLIP to enhance the learning of lessons, with our sharepoint site for this now operational. What is needed now are suggestions from the operating forces on how we can serve them better. Our goal is to take lessons observed, analyze and synthesize them, and then integrate them within Marine Corps doctrine . . ."

## **Reading Lists and Book Reviews**

New Dawn: The Battles for Fallujah by Richard S. Lowry (Savas Beatie, 2010)

Review by Joyce Faulkner, author of In the *Shadow* of *Suribachi* and co-author of *Sunchon Tunnel Massacre Survivors*:

"New Dawn: The Battles for Fallujah is award-winning author Richard Lowry's Opus Magnus. Well-documented, mapped, footnoted, and indexed to enhance comprehension of military terminology, this important piece of American history is as moving as a historical novel and as scholarly as a text book. It's a small piece that packs an enormous wallop.

Unlike other historians who focus solely on battle strategies and tactics, Lowry also introduces the reader to the participants--from the Generals to the Privates--by name. As a result, I shuddered as the Blackwater Contractors were murdered and mutilated in Fallujah - because this time, they weren't strangers but four men with names - Westley Batalona, Jerry Zovko, Scott Helvenston, and Michael Teague. I felt like I was with Gunny Popaditch as he charged into the city to clear out the insurgents - and I was distressed as any friend would be when he was wounded. Throughout the battle, I held my breath and prayed for the safety of real people with mothers and fathers and wives and children - men like Juan Rubio, Benny Alicea, Matthew Smith, and Jason Arellano.

For American tax payers who have come to expect the complications associated with inter-service rivalries, this book highlights the cooperative spirit between the Army, Navy, Air Force, and Marines that made this mission successful. Lowry allows the reader to peek behind the scenes as the Generals define their battle plans, assessing resources and determining who will do what. Then, as the insurgents react, we see Command reassessing and making tactical adjustments. We see the Army offering up not just the resources that were requested, but the resources that were available. We see Navy Corpsman risking their lives to bring aid to the wounded and dying. We watch as the Air Force C130s - Basher and Slasher rain down death on the enemy--and we gasp at the bravery of young men willing to confront fanatics who came to Fallujah specifically to kill Americans.

Battle is grim under the best of circumstances - and this was a long, sweaty journey into horror. However, there are moments that make us laugh - like the time when two officers were talking during a lull in the action. One says to the other, "Let's play the Marine Hymn." They radio back to the Army Psyops group who queues up the tune and broadcasts it. In response to the taunt, the enemy pops up from their hidden positions firing wildly and the Marines pick them off, one by one. . ."

Read the remainder of the review at Amazon.com.

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The Commandant's Professional Reading List was updated in September 2009 by a review board to ensure that it remains relevant and provides all Marines with opportunities for professional and career development. The revised list includes a number of new titles, as well as changes to the previous list. The CMC list, as well as other reading lists (such as those developed by I Marine Expeditionary Force (MEF) and II MEF), provide Marines with a wealth of resources for their own development programs, featuring many books and articles that are as entertaining as they are instructive. These reading lists are highlighted on the Marine Corps University (MCU) website, along with discussion guides and other resources.

This month, we feature a fictional book on the Battle of Thermopylae, *Gates of Fire* by Steven Pressfield, which is on the Commandant's required reading list for Corporals and a new book ("hot of the press") on the critical battles of Fallujah, *New Dawn* by Richard S. Lowry.

Gates of Fire: An Epic Novel of the Battle of Thermopylae by Steven Pressfield (Doubleday, 1998)

**Marine Corp University Discussion Guide** 

### **Background**

. . . The book is fiction based on an actual historical battle between the Persian Empire and the Greeks. The Battle of Thermopylae is a popular subject among historians and warfighters alike. Its popularity spawns from the legend of a meager 300 Spartans who stood their ground to fight back an invading force of a million Persians (historians still disagree on the actual numbers, but many state 300 Spartans plus 6000 Greek allies fought against 150,000-250,000 Persians). Before the battle began, the Spartans already knew they were on the path of a suicide mission. But, winning or losing was not the focus of their thought. They drew their swords against the Persians for freedom, for a principle that they refused to live without. They stood their ground and fought to their certain death in hopes that it would unite all of Greece in arms against the Persian invaders.

This novel dives into the heart of the Spartan culture. The Spartan is a professional soldier, a warrior in heart, mind and deed; no more, no less. As you read this book, you will see how the virtues of character are paramount in the Spartan culture, among women and men. Yes, they are ferocious on the battlefield, but that is not what makes them so strong and dominant against their foes. The secret lies within their warrior culture: the collective character shared among all their warriors. Much like the United States Marine Corps, Spartans uphold a warrior code in strict reverence. That is the common background that binds them and readies them for battle. . ."

Read more of the Marine Corps University discussion guide for *Gates of Fire* on the next page.

## **Reading Lists and Book Review (continued)**

### **Gates of Fire: Discussion Guide (continued)**

- ⇒ In the first few chapters, Xeo faces his fears and falls victim to cowardly acts as a result. He is haunted by his unacceptable behavior and wishes for his own death to escape the guilt. What did he feel guilty for and why did he think his actions were so cowardly? [chapters 1-6]
- ⇒ What was Bruxieus to Diomache and Xeo? [chapters 1-6]
- ⇒ Why did Xeo steal a goose? Did he do the right thing by stealing the goose or was he in the wrong? Later in the book, Lakedaemon boys in training are whipped. Why were they whipped and how does it compare to why Xeo was whipped after he was caught stealing the goose? [chapter 5]
- ⇒ After the death of Tripod, what does Dienekes talk to Alexandros about? What lessons does Dienekes teach Alexandros in their dialogue? [chapter 5]
- ⇒ What reason does the Egyptian soldier give Dienekes for submitting to and joining the Persian Empire? How does Dienekes respond? [Chapter 7]
- ⇒ Dienekes hesitates before he recounts the story about his scar above his brow to Xeo. Why does he hesitate? What does this tell you about Dienekes' character? [Chapter 7]
- ⇒ Dienekes is a great and powerful Spartan warrior. But, he is also very humble. What keeps him humble? And why is it important for a Marine NCO to also be humble? [Chapter 7]

#### **Book Two**

- ⇒ Discuss the aspects of Spartan training (why, or why not, were their methods effective in preparing for battle?). Compare and contrast your own experiences with combat training exercises in the Marine Corps. [Chapter 8]
- ⇒ What is phobologic? Do you agree with its rationale? [Chapter 9]
- ⇒ What was the Spartans' dog tag? [Chapter 11]
- ⇒ Describe three of the Spartans' strategies mentioned in the battle of Antirhion. Why was the battle fought? How did the Spartans achieve victory? What did the Spartans do after victory was theirs? [Chapter 11]
- ⇒ Describe the leadership characteristics of King Leonidas. [Chapter 11]

#### **Book Three**

- ⇒ Compare and contrast Dienekes and Polynikes. [Chapter 12]
- ⇒ What does Polynikes mean when he says, "War not peace, produces virtue?" [Chapter 12]
- ⇒ Describe Spartan women. [Chapter 13]

#### **Book Four**

⇒ Discuss the motives of Arete when she confronts the Peers on the subject of Harmonia's son. What is more important, to her, than her husband's honor? [Chapter 17]

#### **Book Five**

- ⇒ What does Arete reveal about her past love life and what does she ask Xeo to do? [Chapter 20]
- ⇒ Read aloud the speech by King Leonidas on pages 240-242. What does he tell the 300 that they are fighting for? [Chapter 20]
- ⇒ Using the maps in the book and the map below, describe the setting of the battle. Where will the battle happen, who is coming from where, and what are the Spartans' plans?
- ⇒ What do the Spartans do to prepare for the arrival of the Persians? [Chapter 21]
- ⇒ What leadership principles are echoed by King Leonidas's actions on page 250, when the Spartans start to build the wall? [Chapter 21]

Read the rest of the Marine Corps University Discussion Guide Return to the Table of Contents!

### **Roster of MCCLL Liaison Officers**

The latest roster of Marine Corps Center for Lessons Learned (MCCLL) liaison officers (LnOs) at major Marine Corps and joint commands and organizations is provided below. Note that Steve Thompson is the new MCCLL LnO at II MEF, with his contact information provided below. Also, note that MCCLL will expand its LnO coverage in August, with new representatives at Headquarters, Marine Corps (Plans, Policies and Operations (PP&O)), 3d Marine Regiment, 3d Marine Logistics Group (MLG), and 4th Marine Division. As these individuals are assigned, they will be identified in future newsletters. Individuals from commands and organizations that do not have a MCCLL representative may contact Maj Joseph Novario, the MCCLL Operations Officer at 703-432-1317.

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The Marine Corps Center for Lessons Learned (MCCLL) articles contained in this newsletter represent the considered judgment of

experienced analysts assigned to the MCCLL. The purpose of the newsletter is to apprise members of the Marine Corps (as well as members of other Services and Department of Defense (DoD) commands and agencies) of recent items of interest contained in the Marine Corps Lessons Management System (LMS).